

Claims

1. A cover structure for a radio device, comprising a conductive planar component (230; 330; 430) and a dielectric planar component (240; 340; 440), which radio device has a planar antenna, a radiating element of which said conductive planar component is, **characterized** in that

- the dielectric component comprises a first part (241; 341; 441), upper surface of which is part of upper surface of the cover structure, and a second part (242; 342; 442), which is located under the conductive component against its lower surface, and

- on lower surface of the second part of the dielectric component there is a conductive element (220; 320; 420), when connected to the radio device, together with the conductive component of the cover and the ground plane of the planar antenna, forms a resonator that oscillates on at least one operating band of the radio device.

2. A cover structure for a radio device according to Claim 1, the radio device having a main display and a second display, **characterized** in that the first part of the dielectric component (340) is a window of the second display.

3. A cover structure for a radio device according to Claim 2, which radio device (300) is of the foldable type having a first (TP1) and a second (TP2) turning part, **characterized** in that said conductive component (330) extends over a rear part of the first turning part and has an opening of the size of the window for the second display for that window, and the second part of the dielectric component (340) surrounds the opening.

4. A cover structure for a radio device according to Claim 1, **characterized** in that said conductive component (430) is part of a rear part of the cover of a radio device and the dielectric component (440) forms the rest of the rear part of the cover of the radio device.

5. A cover structure according to Claim 1, **characterized** in that there is adhesive material at the junction between the conductive component and the dielectric component.

6. A cover structure according to Claim 1, **characterized** in that the materials of the conductive component and the dielectric component are mixed together at their junction.

AMENDED CLAIMS

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original claims 1-6 replaced by amended claims 1-6 (1 page)]

Claims

1. A cover structure for a radio device, comprising a conductive planar component (230; 330; 430) and a dielectric planar component (240; 340; 440), the conductive planar component extending outside the dielectric planar component, which radio device has a planar antenna, a radiating element of which said conductive planar component is, **characterized** in that
 - the dielectric component comprises a first part (241; 341; 441), upper surface of which is part of upper surface of the cover structure, and a second part (242; 342; 442), which is located under the conductive component against its lower surface, and
 - on lower surface of the second part of the dielectric component there is a conductive element (220; 320; 420), when connected to the radio device, together with the conductive component of the cover and the ground plane of the planar antenna, forms a resonator that oscillates on at least one operating band of the radio device.
2. A cover structure for a radio device according to Claim 1, the radio device having a main display and a second display, **characterized** in that the first part of the dielectric component (340) is a window of the second display.
3. A cover structure for a radio device according to Claim 2, which radio device (300) is of the foldable type having a first (TP1) and a second (TP2) turning part, **characterized** in that said conductive component (330) extends over a rear part of the first turning part and has an opening of the size of the window for the second display for that window, and the second part of the dielectric component (340) surrounds the opening.
4. A cover structure for a radio device according to Claim 1, **characterized** in that said conductive component (430) is part of a rear part of the cover of a radio device and the dielectric component (440) forms the rest of the rear part of the cover of the radio device.
5. A cover structure according to Claim 1, **characterized** in that there is adhesive material at the junction between the conductive component and the dielectric component.
6. A cover structure according to Claim 1, **characterized** in that the materials of the conductive component and the dielectric component are mixed together at their junction.